

PUBLIC HEALTH REPORTS.

UNITED STATES.

[Reports to the Surgeon-General, Public Health and Marine-Hospital Service.]

EPIDEMIC OF AN URTICARIOID DERMATITIS DUE TO A SMALL MITE (*Pediculoides ventricosus*) IN THE STRAW OF MATTRESSES.

A preliminary report by JOSEPH GOLDBERGER, Passed Assistant Surgeon, U. S. Public Health and Marine-Hospital Service, and JAY F. SCHAMBERG, Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic.

We wish to invite the attention of the profession to a skin affection of unusual character which has prevailed in an epidemic form in Philadelphia and vicinity since the early part of May, 1909. We have reason to believe that this disease is not confined to the locality indicated, but occurs more or less in various parts of the United States.

In 1901 Schamberg published (Phila. Med. Journ., July 6, 1901) a short article on "An Epidemic of a Peculiar and Unfamiliar Disease of the Skin," examples of which were in that year simultaneously observed for the first time by Schamberg, Duhring, Hartzell, Stelwagon, and other dermatologists in Philadelphia. Since 1901 cases of this same character have been encountered each year, usually between the months of May and October.

Etiology.—The cause of the peculiar affection which we are considering was until recently very obscure. During the months of May and June, 1909, an outbreak (20 cases) of this eruptive disease developed among the crew upon a private yacht docked in the Delaware River. At almost the same time 33 more cases appeared among the crews of 4 other boats. Besides these 53 cases we learned in the course of our investigation of about 70 other cases in 20 different private residences and boarding houses scattered about the city of Philadelphia and its vicinity. In practically every case we were able to determine that the patient had either recently slept upon a new straw mattress or had freely handled the same. The facts elicited by our inquiry enabled us to exclude from consideration the jute or cotton topping or the ticking of the mattresses and we satisfied ourselves that the essential causative factor was connected with the wheat straw. The mattresses were made by 4 of the leading manufacturers, all of whom received a large proportion if not quite all of their straw from the same source in New Jersey.

In order to establish the etiological rôle of the straw mattresses experimentally, one of us exposed his (left) bare arm and shoulder for one hour between two straw mattresses. At the end of about 16

hours the characteristic itching eruption appeared. Later 3 volunteers slept upon a mattress during a night and each one developed the eruption at the end of about the same period.

We next took some of the straw and sifted such particles as would pass through the meshes of a fine flour sieve. The sifted particles were divided into two portions and placed in two clean glass Petri dishes. One of these was then applied for one hour to the left axilla of a volunteer. At the end of about 16 or 18 hours the characteristic eruption was present in the area of the left axilla to which the Petri dish of straw siftings had been applied.

Having therefore determined not only by deduction from the epidemiological facts but by experiment that the straw in the straw mattresses was in some way capable of producing the eruption we next sought in the straw for the responsible factor. First we exposed for an hour the second portion of the siftings in a Petri dish to the vapour of chloroform under a bell jar with a view to killing any insect or acarine that might be present. These siftings were then applied to the right axilla of the volunteer to whose left axilla the untreated siftings were applied. While, as has been stated, the application of the untreated siftings was followed by the appearance of the characteristic eruption the skin to which the chloroformized siftings were applied remained perfectly normal. We inferred, therefore, that the essential causative factor residing in the straw had been killed by the chloroform fumes. Careful scrutiny of some of the fresh siftings from the straw disclosed the presence of a small almost microscopic mite. Five of these mites were fished out, placed in a clean watch crystal and then applied to the axilla of another volunteer. At the end of about 16 hours following this application 5 of the characteristic lesions appeared on the area to which the mites had been applied.

We established, therefore, that the minute mite which we fished out of the straw siftings was the factor in the straw that was responsible for the production of the eruption. This mite was identified for us by Mr. Nathan Banks, expert in acarina of the United States Bureau of Entomology, as very close to, if not identical with, *Pediculoides ventricosus*.

We have encountered the disease only between the months of May and October, in Philadelphia and its vicinity. A patient with this affection was exhibited by one of us before the American Dermatological Association in June, 1909. Prominent dermatologists from Boston, Baltimore, New York, Chicago, St. Louis, San Francisco, and London stated that they were unfamiliar with the clinical picture presented.

Eruption.—The disease is characterized, as a rule, by an eruption consisting of wheals, nearly all of which are surmounted by a central vesicle, which very rapidly acquires turbid and later pustular contents. This is the peculiar and characteristic lesion of the affection. Instead of frank wheals, the primary efflorescences may be erythematous-urticarial spots or papulo-urticarial lesions. They vary in size from a lentil seed to a finger nail, and are rounded, oval, or irregular in shape. They are of a warm rose color, but only rarely exhibit the pinkish white anemic area seen in the lesions of ordinary "hives." The central vesicle is usually minute, not exceeding a pin head in size; in other cases it may be larger, acquiring the dimensions of a lentil seed or pea.

The eruption is more or less profuse and usually extends over the neck, chest, abdomen, and back, and in a lesser degree over the arms and thighs. Scattered lesions are often observed on the face, forearms, and legs, but the hands and feet are nearly always free. The extent of the eruption and the size of the individual lesions are apt to bear an inverse proportion to each other. In the most profuse eruptions 10,000 or more lesions may be present. In some cases the eruption described may undergo modification and later present patches conforming to the type of erythema multiforme. There are, therefore, 3 varieties of eruption (a) urticaria vesiculo-pustolosa, (b) erythema multiforme, (c) varicelloid type with large central vesicle or pustule.

The eruption is accompanied in well-pronounced cases by the most intolerable itching, which for obvious reasons is worse at night and may seriously interfere with sleep. The pruritis may lead to violent scratching with the production of excoriations.

Systemic symptoms.—Some patients with profuse eruptions have an elevation of temperature varying from 99° F. to 102° F. There may also be at times malaise and anorexia, although as a rule patients do not complain of feeling ill and rarely seek their bed. There is, in some patients, a moderate enlargement of the subcutaneous lymph glands. In 3 instances transient albuminuria was observed.

The affection is apt to be confounded with ordinary "hives" or urticaria, chickenpox, and scabies. We have known many such errors of diagnosis to have been made. In one case with a particularly profuse eruption, the patient was under suspicion of suffering from smallpox.

We have received a number of letters from laymen and physicians in Pennsylvania and Ohio alleging that farmers commonly develop a hive-like eruption after contact with oat straw and rye straw, and that these are therefore not used for bedding. There are several references in foreign literature to mites of the genus *Pediculoides* in grains attacking man and producing cutaneous lesions.

Treatment.—The mattress may be exposed to sulphur fumes, to steam, or to formaldehyde in a vacuum chamber to kill the mite. For the relief of the itching and the cure of the cutaneous condition the following has been found efficacious:

R	
Betanaphthol	gr. xxx
Sulphur. praecip.	5i
Adipis benzoat	3i

Ordinarily the itching will subside within 12 to 36 hours and the eruption will disappear in about a week or ten days. Where, however, the cause is not recognized and the use of the mattress is continued we have known patients to suffer severely for periods of from 3 to 7 weeks, when gradual subsidence and recovery would take place.

We have known patients to be obliged at times to discontinue their daily work owing to loss of sleep and the distress due to itching. Other patients were compelled by their employers to cease work owing to the suspicion of contagion and the opprobrium attaching to the presence of a profuse eruption.

A more exhaustive report of this investigation will, it is hoped, be published later.

Reports from San Francisco, Cal.—Plague-prevention work at San Francisco, Oakland, and Point Richmond, and in Alameda and Contra Costa counties, Cal.

Surgeon Blue reports:

SAN FRANCISCO, CAL.

Date of last case of human plague: Sickened, January 30, 1908.

Date of last case of rodent plague: October 23, 1908.

Week ended June 22, 1909.

Sick inspected.....	1
Plague.....	0
Dead inspected.....	121
Plague.....	0
Premises inspected.....	2, 712
Houses disinfected.....	56
Buildings condemned.....	3
Nuisances abated.....	282
<hr/>	
Rats found dead.....	29
Rats trapped.....	2, 224
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Total rats taken.....	2, 253
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Rats identified:	
Mus norvegicus.....	1, 664
Mus rattus.....	68
Mus musculus.....	499
Mus alexandrinus.....	14
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Total.....	2, 245
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Rats identified as to sex:	
Male.....	847
Female.....	857
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Total.....	1, 704
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Rats examined bacteriologically.....	1, 323
Plague rats.....	0
Poisons placed.....	79, 175

OAKLAND, CAL.

Date of last case of human plague: Sickened July 17, 1908. •

Date of last case of rodent plague: Trapped, December 1, 1908.

Week ended June 19, 1909.

Dead inspected.....	28
Plague.....	0
Premises inspected.....	635
Premises reinspected.....	357
Necropsies held.....	2
Premises cleaned.....	102
Garbage cans installed.....	26
Nuisances abated.....	123
Rats found dead.....	30
Rats trapped.....	813
Rats identified.....	890
Mus norvegicus.....	840
Mus rattus.....	2
Mus musculus.....	47
Mus alexandrinus.....	1
Rats examined bacteriologically.....	840
Plague rats.....	0
Mice examined bacteriologically.....	47
Plague mice.....	0

POINT RICHMOND, CAL.

Week ended June 19.

Premises inspected.....	300
Nuisances abated.....	18
Rats found dead.....	16
Rats trapped.....	13
Rats examined bacteriologically.....	11
Plague rats.....	0
Poisons placed.....	4,000

ALAMEDA COUNTY, CAL.

Week ended June 19.

Dead inspected.....	56
Plague.....	0
Necropsies held.....	3

CONTRA COSTA COUNTY, CAL.

Date of last case of human plague: Sickened July 21, 1908.

Date of last case of rodent plague: Found June 18, 1909.

Week ended June 19.

Dead inspected.....	2
Plague.....	0
Ground squirrels shot.....	683
Ground squirrels found.....	176
Ground squirrels trapped.....	7
Ground squirrels examined bacteriologically.....	578
Ground squirrels infected with <i>B. pestis</i>	12
Ranches inspected.....	82
Acres covered with poison.....	624
Poisons placed.....	3,739

Owing to the extremely warm weather 288 ground squirrels were too badly decomposed to send to the laboratory for examination.

Plague-infected ground squirrels have been obtained from the following places:

<i>June 12, 1909.</i>	
Stewartsville.....	2
<i>June 16, 1909.</i>	
Mount Diablo tract.....	1
<i>June 17, 1909.</i>	
West Hartley.....	5
Mount Diablo tract.....	3
<i>June 18, 1909.</i>	
Stewartsville.....	1

Report from Seattle, Wash.—Plague-prevention work.

Passed Assistant Surgeon Glover reports, June 21:

SEATTLE, WASH.

Date of finding of last plague rat, September 26, 1908.

Week ended June 19, 1909.

Rats received.....	754
Rats necropsied.....	547
Plague rats found.....	0
Plague-infected rats to date.....	21

STATISTICAL REPORTS OF MORBIDITY AND MORTALITY, STATES AND CITIES OF THE UNITED STATES—UNTABULATED.

CALIFORNIA.—Month of May, 1909. Estimated population, 2,037,929. Total number of deaths reported to the state board of health, 2,577, corresponding to an annual death rate of 14.9 per 1,000 of population, including enteric fever 34, measles 13, scarlet fever 10, whooping cough 23, diphtheria 22, and 415 from tuberculosis.

COLORADO—*Colorado Springs*.—Month of January, 1909. Estimated population 32,000. Total number of deaths, 49, corresponding to an annual death rate of 18.38 per 1,000 of population, including 7 from tuberculosis. Cases: Scarlet fever 13, diphtheria 5, and enteric fever 1.

Month of February, 1909. Total number of deaths, 41, corresponding to an annual death rate of 15.37 per 1,000 of population, including enteric fever 1, scarlet fever 2, and 11 from tuberculosis. Cases: Scarlet fever 9, diphtheria 4, and enteric fever 4.

CONNECTICUT—*Bridgeport*.—Month of May, 1909. Estimated population, 100,000. Total number of deaths, 118, including diphtheria 1, measles 2, enteric fever 2, and 12 from tuberculosis. Cases: Diphtheria 18, enteric fever 3, scarlet fever 18, measles 56, enteric fever 3, and pulmonary tuberculosis 13.

FLORIDA.—Cases of communicable diseases diagnosed at the laboratory of the state board of health for the week ended June 26, 1909, are as follows: *Malaria*—Tampa 5; Jacksonville 2; Crescent City, Hawthorne, Mayport, Newburg, and Ocala, each 1 case. *Tuberculosis*—Tampa 6; Jacksonville 3; Astor, Jennings, Monticello, and St. Petersburg, each 1 case. *Enteric fever*—Jacksonville 2; Blichton, Newburg, and Quincy, each 1 case.

ILLINOIS—*Aurora*.—Four weeks ended June 26, 1909. Estimated population, 31,000. Total number of deaths, 23, including 1 from scarlet fever. Cases: Scarlet fever 8, and diphtheria 5.

Quincy.—Month of April, 1909. Estimated population, 43,000. Total number of deaths, 45, including 6 from tuberculosis. Cases: Scarlet fever 2, diphtheria 4, measles 1.

INDIANA—*Jeffersonville*.—Month of April, 1909. Estimated population, 12,000. Total number of deaths, 15, including 2 from tuberculosis. Cases: Enteric fever 1, diphtheria 3, measles 2, and tuberculosis 2.

IOWA.—Report for the four months ended April 30, 1909. Total number of deaths, 7,563, including diphtheria 55, measles 17, pneumonia 1,248, scarlet fever 41, smallpox 1, enteric fever 69, whooping cough 33, and 557 from tuberculosis.

Davenport.—Two months ended April 30, 1909. Estimated population, 42,000. Total number of deaths not reported. Deaths from

contagious diseases: Scarlet fever 2, and 10 from tuberculosis. Cases: Enteric fever 8, scarlet fever 8, diphtheria 7, measles 18, whooping cough 3, and tuberculosis 12.

KANSAS.—Month of March, 1909. Estimated population, 1,470,495. Total number of deaths from contagious and infectious diseases, 115. Causes of death: Tuberculosis 82, enteric fever 11, diphtheria 11, scarlet fever 7, and 4 from measles. Cases: Tuberculosis 134, enteric fever 35, diphtheria 82, scarlet fever 186, smallpox 358, and measles 562.

KENTUCKY—*Henderson*.—Month of April, 1909. Estimated population, 18,700. Total number of deaths, 11, including 2 from tuberculosis. Cases: Enteric fever 1, scarlet fever 2, diphtheria 1, and tuberculosis 1.

MARYLAND—*Washington County*.—Month of April, 1909. Estimated population, 55,000. Total number of deaths, 55, including enteric fever 1, measles 4, whooping cough 1, and 6 from tuberculosis. Cases: Enteric fever 2, diphtheria 6, and measles 152.

Month of May, 1909. Total number of deaths, 48, including measles 11, and 3 from tuberculosis. Cases: Enteric fever 2, scarlet fever 2, diphtheria 1, and measles 160.

MINNESOTA.—Month of March, 1909. Estimated population, 1,979,658. Reports to the state board of health show as follows: Total number of deaths, 1,757, including diphtheria 45, enteric fever 33, scarlet fever 28, measles 4, whooping cough 18, smallpox 2, and 203 from tuberculosis. Deaths reported from state institutions during the month numbered 30, including 6 from tuberculosis.

MISSOURI—*St. Louis*.—Month of February, 1909. Estimated population, 735,000 (white, 688,000; colored, 47,000). Total number of deaths, 921 (white, 815; colored 106), including diphtheria 16, measles 25, enteric fever 3, whooping cough 2, scarlet fever 2, and 116 from pulmonary tuberculosis. Cases of contagious diseases reported: Diphtheria 185, enteric fever 14, measles 977, scarlet fever 91, whooping cough 21, smallpox 6, leprosy 1, and pulmonary tuberculosis 186.

MONTANA.—Month of May, 1909. Estimated population, 280,000. Reports to the state board of health show as follows: Total number of deaths, 384, including diphtheria 10, enteric fever 6, scarlet fever 11, measles 1, and 24 from tuberculosis. Cases: Diphtheria 72, enteric fever 18, measles 112, scarlet fever 256, and smallpox 50.

NEW YORK—*Rochester*.—Three months ended April 30, 1909. Estimated population, 200,000. Total number of deaths, 799, corresponding to an annual death rate of 16.36 per 1,000 of population, including tuberculosis 97, measles 15, enteric fever 5, whooping cough 6, and 3 from diphtheria. Cases: Scarlet fever 93, diphtheria 22, and enteric fever 9.

Saratoga Springs.—Three months ended April 30, 1909. Estimated population, 11,822. Total number of deaths, 59, including diphtheria 1, and 5 from tuberculosis. Cases: Scarlet fever 3, diphtheria 6, enteric fever 2, and tuberculosis 10.

OHIO—Cleveland.—Month of May, 1909. Estimated population, 515,000. Total number of deaths 601, including enteric fever 5, measles 6, scarlet fever 3, whooping cough 5, diphtheria 1, and 61 from tuberculosis. Cases not reported.

Toledo.—Month of April, 1909. Estimated population, 187,453. Total number of deaths 162, corresponding to an annual death rate of 9.924 per 1,000 of population, including enteric fever 2, diphtheria 1, and 24 from tuberculosis. Cases: Diphtheria 17, scarlet fever 11, and measles 25.

Month of May, 1909. Total number of deaths 180, corresponding to an annual death rate of 11.03 per 1,000 of population, including enteric fever 3, diphtheria 2, and 20 from tuberculosis. Cases: Diphtheria 16, scarlet fever 8, measles 64, and smallpox 1.

SOUTH CAROLINA—Charleston.—Month of March, 1909. Census population 1900, 55,807. Total number of deaths 112, including enteric fever 4, and 4 from tuberculosis. Cases: Enteric fever 5, and diphtheria 3.

Month of May, 1909. Total number of deaths 138, including enteric fever 1, and 15 from tuberculosis. Cases: Enteric fever 15, scarlet fever 1, and diphtheria 1.

WISCONSIN—Milwaukee.—Month of May, 1909. Estimated population, 370,000. Total number of deaths 459, including enteric fever 4, scarlet fever 27, diphtheria 14, measles 6, and 35 from tuberculosis. Cases: Smallpox 6, tuberculosis 60, diphtheria 61, scarlet fever 138, enteric fever 27, and measles 239.

Smallpox in the United States as reported to the Surgeon-General, Public Health and Marine-Hospital Service, June 26 to July 9, 1909.

[For reports received from December 25, 1908, to June 25, 1909, see PUBLIC HEALTH REPORTS for June 25, 1909.]

[NOTE.—In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

Place.	Date.	Cases.	Deaths.	Remarks.
California:				
Ho'art Mills.....	Apr. 1-30.....	1	.....
Sacramento.....	June 6-12.....	1	.....
San Francisco.....	June 6-12.....	1	.....
Truckee.....	Mar. 23.....	3	.....
Total for State.....		6	.....
Georgia:				
Macon.....	June 14-27.....	6	.....
Total for State.....		6	.....

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Illinois:				
Alexander County—				
Calro.....	May 1-31.....	18		
Champaign County.....	Apr. 1-May 31.....	25		
Christian County.....	Apr. 1-May 31.....	35		Including Taylorville.
Clay County.....	Apr. 1-30.....	1		
Clinton County.....	Apr. 1-May 31.....	6		
Cook County—				
Chicago.....	June 20-26.....	2		
Dewitt County.....	May 1-31.....	7		
Edwards County.....	Apr. 1-May 31.....	3		
Efingham County.....	Apr. 1-30.....	2		
Fayette County.....	May 1-31.....	2		
Franklin County.....	Apr. 1-May 31.....	2		
Fulton County.....	Apr. 1-30.....			Present.
Gallatin County.....	Apr. 1-May 31.....	16		
Iroquois County.....	May 1-31.....	1		
Jackson County.....	Apr. 1-May 31.....	14		
Murphysboro.....	Apr. 1-May 31.....	40		
Knox County.....	Apr. 1-30.....	8		
Lake County.....	Apr. 1-May 31.....	3		
LaSalle County.....	Apr. 1-30.....	3		
McDonough County.....	Apr. 1-30.....	25		Including Industry.
McHenry County—				
Marengo.....	May 1-31.....	80		
Macoupin County.....	Apr. 1-May 31.....	6		
Madison County.....	May 1-31.....	1		
Marion County.....	Apr. 1-May 31.....	13		
Massac County—				
Metropolis.....	Apr. 1-May 31.....	29		
Montgomery County.....	May 1-31.....	1		
Peoria County.....	Apr. 1-May 31.....	8		
Perry County.....	Apr. 1-May 31.....	11		
Pulaski County.....	May 1-31.....	5		
St. Clair County.....	May 1-31.....	9		
Saline County.....	May 1-31.....	30		
Sangamon County.....	Apr. 1-30.....	1		
Schuyler County.....	May 1-31.....	1		
Shelby County.....	Apr. 1-May 31.....	2		
Stephenson County.....	May 1-31.....	4		
Tazewell County.....	May 1-31.....	5		
Pekin.....	Apr. 1-May 31.....	47		
Union County.....	Apr. 1-May 31.....	5		
Vermilion County.....	Apr. 1-May 31.....	2		
Danville.....	June 14-27.....	5		
Williamson County.....	Apr. 1-May 31.....	6		
Woodford County.....	Apr. 1-May 31.....	21		
Total for State.....		505		
Indiana:				
Fort Wayne.....	June 6-19.....	21		
Indianapolis.....	June 14-20.....	1		
Muncie.....	June 20-26.....	1		
South Bend.....	June 13-26.....	4		
Total for State.....		27		
Kansas:				
Kansas City.....	June 13-26.....	8		
Total for State.....		8		
Kentucky:				
Covington.....	June 13-26.....	3		
Lexington.....	June 20-26.....	5		
Newport.....	June 14-20.....	1		
Paducah.....	June 13-26.....	3		
Total for State.....		12		
Louisiana:				
New Orleans.....	June 13-26.....	4		
Total for State.....		4		
Michigan:				
Chippewa County.....	May 1-31.....	1		
Eaton County.....	May 1-31.....	5		
Houghton County.....	May 1-31.....	1		
Ingham County.....	May 1-31.....	1		
Jackson County.....	May 1-31.....	1		

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Michigan—Continued.				
Kent County—				
Grand Rapids.....	June 20-26.....	1		
Marquette County.....	May 1-31.....	4		
Muskegon County.....	May 1-31.....	5		
Oceana County.....	May 1-31.....	1		
Ottawa County.....	May 1-31.....	4		
Saginaw County.....	May 1-31.....	16		
St. Clair County.....	May 1-31.....	1		
Tuscola County.....	May 1-31.....	4		
Wayne County—				
Detroit.....	May 1-31.....	1		
Total for State.....		46		
Minnesota, general.				
Duluth.....	Mar. 1-31.....		2	
June 19-25.....		2		
Minneapolis.....	May 1-31.....	20		
Total for State.....		22	2	
Missouri:				
Kansas City.....	June 13-26.....	2		
St. Joseph.....	May 30-June 19.....	4		
St. Louis.....	June 20-26.....	2		
Total for State.....		8		
Montana:				
Dawson County.....	May 1-31.....	5		
Deer Lodge County.....	May 1-31.....	1		
Flathead County.....	May 1-31.....	4		
Gallatin County.....	May 1-31.....	4		
Jefferson County.....	May 1-31.....	2		
Lewis and Clark County—				
Helena.....	May 1-31.....	1		
Park County.....	May 1-31.....	6		
Livingston.....	May 1-31.....	6		
Sanders County.....	May 1-31.....	1		
Silver Bow County—				
Butte.....	June 11-24.....	6		
Teton County.....	May 1-31.....	1		
Valley County.....	May 1-31.....	1		
Yellowstone County.....	May 1-31.....	1		
Total for State.....		39		
Nebraska:				
Lincoln.....	May 1-31.....	14		
Total for State.....		14		
North Carolina:				
Bladen County.....	Apr. 1-30.....	5		
Buncombe County.....	Apr. 1-30.....	1		
Caldwell County.....	Apr. 1-30.....	16		
Camden County.....	Apr. 1-30.....	15		
Carteret County.....	Apr. 1-30.....	1		
Craven County.....	Apr. 1-30.....	6		
Duplin County.....	Apr. 1-30.....	6		
Johnston County.....	Apr. 1-30.....	2		
Lee County.....	Apr. 1-30.....	6		
Mitchell County.....	Apr. 1-30.....			
Onslow County.....	Apr. 1-30.....	2		
Pasquotank County.....	Apr. 1-30.....	14		
Pitt County.....	Apr. 1-30.....	2		
Sampson County.....	Apr. 1-30.....	5		
Wake County.....	Apr. 1-30.....	2		
Wilson County.....	Apr. 1-30.....	1		
Yancey County.....	Apr. 1-30.....	3		
Total for State.....		87		
Ohio:				
Cincinnati.....	June 12-18.....	3		
Total for State.....		3		
Oregon:				
Portland.....	Apr. 1-30.....	6		
Total for State.....		6		

Present.

Smallpox in the United States, etc.—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Oklahoma:				
Oklahoma.....	Apr. 3-July 12.....	49	.....
Total for State.....		49	.....
Tennessee:				
Knoxville.....	June 20-26.....	4	.....
Total for State.....		4	.....
Texas:				
Bexar County—				
San Antonio.....	June 13-19.....	5	.....
Galveston County—				
Galveston.....	June 19-25.....	1	.....
San Saba County.....	Apr. 9-May 26.....	11	.....
Laredo County.....	June 19.....	1	.....
Total for State.....		18	.....
Utah:				
Box Elder County.....	May 1-31.....	3	.....
Davis County.....	May 1-31.....	6	.....
Garfield County.....	May 1-31.....	1	.....
Salt Lake County.....	May 1-31.....	16	.....
San Pete County.....	May 1-31.....	20	.....
Summit County.....	May 1-31.....	18	.....
Tooele County.....	May 1-31.....	5	.....
Uintah County.....	May 1-31.....	1	.....
Utah County.....	May 1-31.....	6	.....
Weber County.....	May 1-31.....	3	.....
Total for State.....		79	.....
Virginia:				
Lynchburg.....	June 20-26.....	1	.....
Total for State.....		1	.....
Washington:				
Spokane.....	June 6-19.....	5	.....
Tacoma.....	May 14-20.....	4	.....
Total for State.....		9	.....
Wisconsin:				
Appleton.....	June 20-26.....	1	.....
La Crosse.....	June 13-19.....	1	.....
Total for State.....		2	.....
Grand total for the United States.....		955	2	

Including 2 cases from May 17-23. Received out of date.

Weekly morbidity and mortality table, cities of the United States.

[For smallpox, see special table.]

Cities.	Week ended—	Population, United States census, 1900.	Total deaths from all causes.	Tuberculosis.		Enteric fever.		Scarlet fever.		Diphtheria.		Measles.		Whooping cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Altoona, Pa.	June 26	38,973	7	4				6				14			
Ann Arbor, Mich.	do.	14,509	10	2				1							
Ashtabula, Ohio.	June 25	12,949	5											1	1
Baltimore, Md.	June 26	508,957	175	20	27	6	2	6		8		41	2	16	4
Bath, Me.	do.	10,477						1				15			
Bayonne, N. J.	do.	32,722		1				5		5					
Beaver Falls, Pa.	do.	13,000								1					
Berkeley, Cal.	June 19	13,214	9									1			
Biddeford, Me.	June 26	16,145	10							2	2				
Biloxi, Miss.	May 29	5,467	3												
Do.	June 5	5,467	2												
Binghamton, N. Y.	June 26	38,647	10	3	1							11			
Boston, Mass.	do.	560,892	190	54	14	6	1	33	1	39	2	75	1	2	1
Braddock, Pa.	do.	15,654	4			2		2	1	4					
Bradford, Pa.	do.	15,029	9					1							
Bridgeport, Conn.	do.	70,996	33		2	1	1	1		1		2		2	
Brockton, Mass.	do.	40,063	10	2	1	3		2				2		1	
Butte, Mont.	June 24	30,470	11	2				3	1	3					
Cambridge, Mass.	June 26	91,886	36	6	6			3		5		17			
Camden, N. J.	do.	75,935	27					2		2		1			
Camden, S. C.	do.	2,441	1									2			
Carbondale, Pa.	do.	13,536	4	2				4		1					
Charlotte, N. C.	June 11	18,091	11			4	1								
Do.	June 25	18,091	8			6						1			
Chelsea, Mass.	June 26	34,072	11	2	1			4		1		4			
Chicago, Ill.	do.	1,698,575	492	60	73	21	3	68	6	74	12	408	4	45	1
Chicopee, Mass.	do.	19,167	11	1						1					
Cincinnati, Ohio.	June 25	325,902	121	11	16	4	2			3		16		6	
Cleveland, Ohio.	do.	381,768	110	21	8	7		6		12		84		3	
Clinton, Mass.	June 26	13,667	3												
Columbus, Ga.	do.	17,614	7		2		1								
Columbus, Ohio.	do.	125,560	48	9	5	4		3				9			
Concord, N. H.	do.	19,632	7	1	1					1		17			
Council Bluffs, Iowa.	June 21	25,802	4									3			
Covington, Ky.	June 26	42,938	16		3	1									
Danville, Ill.	June 27	16,534	8							1		1		1	
Davenport, Iowa.	do.	35,254								4				1	
Dayton, Ohio.	June 26	85,333	40		6			2		4		40			
Detroit, Mich.	June 5	285,704	145					10	2	9	2				
Do.	June 26	285,704	121			1	1	6		7					
Duluth, Minn.	June 25	80,000	24	5	2	1	1	29	1	19	4	19			
Dunkirk, N. Y.	June 26	11,616	3	3	1										
Elmira, N. Y.	do.	35,672	5			1		2		5	1	5			
El Paso, Tex.	June 29	15,905	25		4							2			
Elkhart, Ind.	June 26	15,184	2	1											
Erie, Pa.	do.	52,733	17	6	1							61	1	6	2
Evansville, Ind.	do.	59,007	28		5	9	2					1			
Everett, Mass.	do.	24,336	11	1				1				2	1		
Fall River, Mass.	do.	104,863	43	9	4	2		3		3		6			
Galesburg, Ill.	do.	18,607	3												
Galveston, Tex.	June 25	37,789	11	2		4		2							
Glens Falls, N. Y.	June 5	13,543	3							1		5			
Do.	June 19	13,543	3							1		5			
Grand Rapids, Mich.	June 26	87,565	31	2				7		3		19		2	
Greensboro, N. C.	do.	10,035	7	3	1	2									
Hammond, Ind.	do.	12,376	7												
Harrison, N. J.	do.	10,596	2							1					
Hartford, Conn.	June 27	79,850	33	5	2			1		4					
Haverhill, Mass.	June 26	37,175	11		1	2		1		4		11			
Hoboken, N. J.	do.	59,364						1		1		1		1	
Homestead, Pa.	June 14	12,554	12		1			1				5		1	
Hyde Park, Mass.	June 26	13,244	1							2					
Indianapolis, Ind.	June 20	169,164	38	1	10	7	1	5		2		71			1
Do.	June 27	169,164	67	6	11			5		4		44	1		
Jacksonville, Fla.	June 26	28,429	30	4	4	4		1							
Jersey City, N. J.	June 27	206,433	102		14	3	2	10	4	3		13		4	
Johnstown, Pa.	June 26	35,936	15	5				8				20	1	4	
Kalamazoo, Mich.	do.	24,404	6	1				1				15		7	1
Kansas City, Kans.	do.	51,418	21		1					3		21			
Kansas City, Mo.	do.	163,752	50		3	4		6		4		15		2	
Kearny, N. J.	do.	10,896	2	2	1			1		1		2			
Kingston, N. Y.	do.	24,535	17		1		1								

* Reported out of date.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Popula- tion, United States census, 1900.	Total deaths from all causes.	Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Knoxville, Tenn.	June 20	32,637	14	3	3	1	1					2			
La Crosse, Wis.	do.	28,895	7		1										
Lafayette, Ind.	June 28	18,116	3												
Lancaster, Pa.	June 27	41,459	14	10	1	34		5		1		4			
Lawrence, Mass.	June 26	62,559	18	2	2	1				4		19	1		1
Lebanon, Pa.	do.	17,628	7		2	2		2				3			
Lexington, Ky.	do.	26,369	18			1	1			1					
Los Angeles, Cal.	June 19	102,479		13	11	7	1	8		3		1			
Lowell, Mass.	June 26	94,969	34	2	4	1	4	1	2	1		3			
Lynchburg, Va.	do.	18,891		1		2								2	
Lynn, Mass.	do.	68,513	25		2	1		5		3					
Macon, Ga.	June 27	23,746	2					1							
Malden, Mass.	June 26	33,664	13	2	1	1	4			3		1			
Manchester, N. H.	do.	56,987	33	2	2	1	1	1		5		41	1		1
Manitowoc, Wis.	do.	11,786	5												
Marinette, Wis.	do.	16,195	2												
Marlboro, Mass.	June 19	13,099	4									1			
Massillon, Ohio.	June 26	11,944	3		1										
Medford, Mass.	do.	18,244	5							4		45			
Melrose, Mass.	do.	12,962	3	2								2			
Milwaukee, Wis.	June 20	285,315	85	18	10	7	3	21	6	4		83	3	1	
Montclair, N. J.	June 19	13,962	2									1			
Montgomery, Ala.	June 25	30,346	17		1		1								
Moline, Ill.	June 27	17,248	5					3	1						
Mount Vernon, N. Y.	June 26	21,228	4					1							
Muncie, Ind.	do.	20,942	6	1	2										
Nanticoke, Pa. ^a	June 30	12,616	7	4								8	2		
Nashville, Tenn.	June 26	80,865	49	4	4	5		1							
Nebraska City, Nebr.	do.	7,200	1									4			
Newark, N. J.	do.	246,070	89		14	1		29		16	2	1			
New Bedford, Mass.	do.	63,442	33	2	3	4		8		1		10			
Newburyport, Mass.	do.	14,478	7			1	1						1		
New London, Conn.	do.	17,548	3												
New Orleans, La.	do.	278,104	123	23	14	15	2	31	2	4		1			
Newton, Mass.	do.	33,587	10			1				2		14			
New York, N. Y.	do.	3,437,202	1,442	518	171	28	11	207	9	303	38	1,100	35	62	10
Niagara Falls, N. Y.	do.	19,457	9		1	3	1	3	1	303					
Norristown, Pa.	do.	22,265	7	3	1							4	1		
North Adams, Mass.	do.	24,200	7		1		1								
Northampton, Mass.	do.	18,643	9									1			
Oakland, Cal. ^b	May 17	66,960		3		3		3		5	1	7			
Do.	June 21	66,960		2				2		3	1	2			
Orange, N. J.	June 26	24,141	3	1						1		3			
Paducah, Ky.	do.	19,446	17	5	3	1		1							
Peeckskill, N. Y.	do.	10,358	5							2		45	1		
Pittsburg, Pa.	do.	321,616	163	35	11	17	1	8		6		22	1	34	2
Pittsfield, Mass.	do.	21,766	12			1		1				1			
Plainfield, N. J.	do.	15,369	1					1				4			
Plymouth, Pa.	do.	13,649		4				1		1		1			
Portland, Me.	June 5	50,145	22		1					1					1
Do.	June 12	50,145	21		5										
Do.	June 19	50,145	18												
Do.	June 26	50,145	20		1										
Portsmouth, N. H.	do.	10,637								1		10			
Pottstown, Pa.	do.	13,696	5							3					
Providence, R. I.	do.	175,597	71	11	6	2		5		6	1	9	1		
Racine, Wis.	do.	29,162	3	1	1			1							
Reading, Pa.	June 28	78,961	24	2		2				2		4		2	
Rock Island, Ill.	June 26	19,493	5			2									
Saginaw, Mich.	June 19	42,345	18	1	1							6			
St. Joseph, Mo.	June 5	102,879	8		1					1		1			
Do.	June 12	102,879	12		1							3			
Do.	June 19	102,879	8					4				1			
Do.	June 26	102,879	9			1		2				1			
Sandusky, Ohio.	June 6	19,664	2									5			
Do.	June 12	19,664	5			1						2			
Do.	June 19	19,664	5									1			
Do.	June 26	19,664	3									4			
San Francisco, Cal.	June 19	342,782	101	24	7	5		8		11	1	11	1	3	1
San Jose, Cal.	do.	21,500	6		1										
Schenectady, N. Y.	June 26	31,682	13	8		1		3				4		1	
Shamokin, Pa.	June 5	18,202		1								6			
Do.	June 26	18,202										5			

^a Reports cover 10 days.^b Reported out of date.

Weekly morbidity and mortality table, cities of the United States—Continued.

Cities.	Week ended—	Popula- tion, United States census. 1900.	Total deaths from all causes.	Tuber- culosis.		Enteric fever.		Scarlet fever.		Diph- theria.		Measles.		Whoop- ing cough.	
				Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Somerville, Mass.	June 20	61,643	16	3	3	1	...	3	...	5	...	21	1	...	...
South Bend, Ind.	do.	35,999	14	1	...	5	2	3	...	2	...	...	...	...	...
South Bethlehem, Pa.	do.	13,241	7	1	...	...	...	...	...	...	...	17	1	...	...
Spokane, Wash.	June 19	38,818	25	...	1	2	1	25	3	3	1	3	...	...	...
Springfield, Mass.	June 26	62,059	35	3	...	...	...	4	...	7	...	24	1	3	1
Steelton, Pa.	do.	12,068	7	...	...	...	...	2	...	1	...	3	...	...	...
Superior, Wis.	do.	31,091	6	...	...	...	...	2	...	1	...	...	...	...	...
Tacoma, Wash.	June 20	37,714	9	3	1	...	...	10	...	2	...	...	...	...	...
Taunton, Mass.	June 26	31,036	8	...	...	...	...	2	...	...	...	7	...	3	...
Terre Haute, Ind.	do.	36,673	9	...	2	...	...	...	...	...	...	...	...	...	...
Titusville, Pa.	do.	8,244	2	...	...	...	...	2	...	...	...	...	...	...	...
Trenton, N. J.	do.	73,307	...	2	2	3	2	2	...	2	...	...	...	...	...
Walla Walla, Wash.	June 25	10,049	3	...	...	...	...	...	...	...	...	...	...	...	...
Waltham, Mass.	June 26	23,481	10	...	2	...	...	1	...	1	...	9	...	1	...
Warren, Ohio.	do.	8,529	2	...	...	...	...	...	...	1	...	...	...	...	...
Washington, D. C.	do.	278,718	159	21	10	16	2	26	...	5	...	13	...	14	4
Weymouth, Mass.	do.	11,324	2	...	1	...	...	1	...	...	...	1	...	...	...
Wheeling, W. Va.	do.	38,878	16	...	1	1	1	...	...	2	...	...	...	...	...
Wilkes-Barre, Pa.	June 25	51,721	25	5	1	1	...	...	...	7	...	11	...	4	...
Wilkesburg, Pa.	June 28	13,000	2	1	...	...	...	1	...	...	...	5	...	...	...
Wilmington, Del.	June 19	76,508	22	...	2	...	...	...	...	...	...	...	...	...	...
Do.	June 26	76,508	21	...	3	...	1	...	...	...	...	...	...	...	...
Winona, Minn.	June 29	19,714	2	...	...	...	...	...	...	...	...	...	...	...	...
Woburn, Mass.	June 26	14,254	3	...	1	...	...	...	...	...	...	1	...	...	...
York, Pa.	do.	33,708	...	...	...	...	...	3	...	3	...	...	...	...	...
Zanesville, Ohio.	do.	23,538	5	1	...	4	...	...	...	1	...	...	...	...	...

FOREIGN AND INSULAR.

CHINA.

Reports from Amoy—Inspection of vessels—Examination of emigrants—Leprosy, plague, and smallpox—Epidemic plague at Chinchew.

Passed Assistant Surgeon Foster reports, May 10, 18, and 24:

Week ended May 8. No bills of health issued.

Leprosy, plague, and smallpox are present in Amoy.

Week ended May 15. Bills of health issued to 2 steamships.

May 10 the British steamship *Kaifong*, with 57 in the crew and 42 cabin passengers for Manila, Cebu, and Iloilo, was granted a supplemental bill of health. One passenger was rejected for trachoma. May 10 the British steamship *Loong Sang*, with 55 in the crew, for Manila via Hongkong, was granted an original bill of health. No passengers were embarked at this port.

Leprosy, plague, and smallpox present.

Week ended May 22. No bills of health issued. Leprosy and plague present.

May 22 plague was reported epidemic in Chinchew, a city situated 50 miles north of Amoy.

Improved methods of inspection and certification of emigrants at the port of Amoy.

Consul Arnold reports, May 15:

The Philippine authorities imposed a quarantine on all vessels coming from Amoy and arriving in a Philippine port after April 15 of this year. Vessels arriving after that date are required to go into quarantine at Mariveles quarantine station, where the passengers are disembarked and placed in detention barracks, and the vessel, after inspection and disinfection, is permitted to proceed to Manila. The crews, with the exception of the captain and such other officers as are specifically exempted by the quarantine boarding officer, remain aboard the vessels during their stay in the Philippines. This quarantine materially affects the trade of this port with the Philippine Islands. The local shipping firms have arranged for the purchase of a floating disinfectant plant from the Philippine authorities. In future all Chinese passengers embarking from this port for the Philippine Islands will be bathed and have their effects disinfected at this plant under the supervision of the service officer, and when disinfection has been completed be permitted to enter the Philippine Islands without the necessity of detention at Mariveles quarantine station.

Chinese returning to the Philippine Islands after their papers have been stamped by the consul are examined by the service officer for

quarantinable diseases and vaccinated. Chinese going to American territory for the first time are examined for trachoma and infectious diseases.

Upon the date of sailing of a steamship carrying Chinese passengers to the Philippine Islands the American consul and the service officer go on board, the consul to examine the papers of the passengers, in order to reduce to a minimum the number of detentions at ports in the Philippine Islands, and the officer to examine the passengers and cargo.

Report from Shanghai—Inspection of vessels—Examination of emigrants—Smallpox—Plague-infected rats—Smallpox at Hankau and Tientsin.

Acting Assistant Surgeon Ransom reports, May 19:

Week ended May 15. Bills of health granted to 2 steamships having an aggregate personnel of 475. There were inspected 1 vessel, 62 members of crews, and 3 cabin passengers. Three emigrants for San Francisco per steamship *China* were examined and passed; their baggage was disinfected with formalin. There were also disinfected 4 pieces of freight, personal effects, and inspection was made of numerous shipments destined to the United States to ascertain if they were packed in accordance with the requirements in force at this port.

The report of the municipal health department shows for the week 1 death from smallpox among natives.

The percentage of plague-infected rats found among those examined has fallen from 3.7 to 1.1. The eastern district of the settlement, which was the district originally infected and in which the greatest number of infected rodents have been found, has contributed no plague rats for two weeks. The northern district was responsible for the only plague-infected rats found during the period under consideration. There were examined 465 rats, of which only 4 were found to be infected.

The health conditions of Shanghai are very good.

Reports from Hankau for the week ended May 8 show smallpox and relapsing fever present among natives, but not in severe epidemic form. The number of cases and deaths is not given.

Reports from Tientsin for the week ended May 1 show 1 case of smallpox.

These reports include only the British and Japanese concessions.

Report from Swatow—Epidemic plague in vicinity.

Consul Pontius reports, May 11:

For some weeks an epidemic of bubonic plague has been prevalent throughout the surrounding districts. Plague first appeared at the following places: Chi Wei Hsiang, Chiao Tung, Cheng Chiang, Hsia Tung, Ching Pun, Hsi Chang, Chi Tan, Touchowfu, and Chih Yang. At these places the epidemic has caused an estimated total of more than 1,000 deaths.

During the past three weeks plague has appeared also at Chaochowfu, Ampou, Ko Lung, Chipienhsien, and Tatapu. Several of these places are in the immediate vicinity of Swatow. A number of

people have fled to Swatow from the infected districts. Of the places mentioned, Chaochowfu suffered most, having a total of nearly 600 deaths. Ampou has a death list of about 200 to date. An estimate of the total deaths to date places the amount at between 1,900 and 2,000.

The local authorities keep no record of the deaths which occur and no effort seems to be made to check the spread of the epidemic. Information can be obtained only from native sources, and the figures given are only approximate. (See Public Health Reports, June 25, 1909, p. 917.)

COSTA RICA.

Report from Limon, fruit port.

Acting Assistant Surgeon Goodman reports:

Week ended June 19. Estimated population, 8,000. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
June 13	Esparta.....	Boston.....	43	8	0
13	Chickahominy.....	New Orleans via Bocas.....	47	0	0
14	Sibiria.....	New York.....	55	12	0
16	Cartago.....	New Orleans.....	88	7	34
16	Bertha.....	New Orleans via Bocas.....	26	a 6	0
17	Origen.....	New Orleans.....	24	0	0
18	Helen.....	Mobile.....	22	0	0
19	Oracabessa.....	New Orleans.....	46	0	0

a For Bocas.

CUBA.

Report from Santiago—Inspection of vessels—Leprosy—House and water-deposit inspection.

Acting Assistant Surgeon Wilson reports, June 23:

Week ended June 19.

Bills of health issued to 7 vessels bound for the United States. No vessel was fumigated. No new quarantinable disease was reported. The 3 cases of leprosy previously reported are still under treatment.

The sanitary department reports 4,060 house inspections and that larvæ were found in 16 water deposits.

Inspection work in vicinity of Santiago.

Acting Assistant Surgeon Noiret reports, June 26, through Passed Assistant Surgeon Amessee at Habana:

Inspection work for the week ended June 26.—St. Luis: Population, 3,400, principally Cubans. Water supply from wells, and not very good. No enteric fever present, the only prevailing fever being malarial. Two months ago there were 4 cases of enteric fever. Mosquitoes are plentiful. Larvæ were found in 3 different places.

Palma Surino: A town of 2,600 inhabitants, principally Spaniards, with a few Americans. The water supply is very good. There is no enteric fever, the only prevailing fever being malarial. Mosquitoes are plentiful and larvæ have been found. The town is in good sanitary condition.

Áltro Cedro: Very small town, the junction of the Cuban railroad to Antillas; population, 200. Water supply very bad. No physician at the place. I found 4 barrels containing rain water and full of mosquito larvæ.

Dumois Entrouque: A railroad depot. Six barrels containing rain water and full of larvæ were found. No sanitary inspector has visited this place for the past year.

Banes: Sugar plantation belonging to the United Fruit Company; population, 2,500. The surrounding country has a large population. The company maintains a physician and there is a local health officer. Sanitary conditions are satisfactory. The water supply is not very good. No enteric fever has been present for two months. Malarial fever is the only disease present. Yellow fever is not known. No larvæ were found, but mosquitoes very plentiful.

Antilla: A very small town on Nipe Bay; population, 200. No physician and no sanitary inspector. Larvæ found in different places.

Preston: Sugar plantation belonging to United Fruit Company; population, 2,450. A town only 4 years old. Sanitary conditions are good. No mosquitoes were found and no larvæ. The water supply is very good. There is a health officer. Enteric fever and yellow fever are not known.

Felton: Population of 2,600. Same conditions present as at Preston. There is a health officer.

Miayri: Ten miles from Felton. An iron-mine settlement belonging to the Spanish-American Company. Water supply good, but sanitary conditions are not satisfactory. The mine was opened 1 year ago. The living quarters are very poor. There is a health officer. Enteric fever and yellow fever not known. Larvæ found in different places; mosquitoes plentiful.

Sevilla: Midway between El Caney and Santiago I inspected a large tank and found considerable larvæ, which fact I reported to the health authority at Santiago. I inspected El Caney and found no larvæ. The health inspectors had just oiled the town.

ECUADOR.

Report from Guayaquil—Death of Passed Assistant Surgeon Wightman.

Consul Dietrich reports, May 17:

Dr. William Martin Wightman, passed assistant surgeon of the Public Health and Marine-Hospital Service, who had been detailed for duty at this consulate-general since April 7, 1908, died of yellow fever May 16, after an illness of five days.

GERMANY.

Reports from Berlin—Status of cholera at St. Petersburg, Russia.

The following are received from Consul-General Thackara, under dates of June 18 and 21:

According to information received from St. Petersburg, 22 new cases of cholera with 6 deaths were reported in that city June 16. The total number of cholera patients is now 96. The epidemic appears to be increasing in many districts of the St. Petersburg government.

June 19, 34 fresh cases of cholera with 10 deaths.

GREAT BRITAIN.

Report from Liverpool—History of yellow fever on steamship Lanfranc from Brazilian ports for Liverpool via ports of call.

Consul Griffiths reports, June 14:

The steamship *Lanfranc* en route from Liverpool to Manaus stopped at an Amazon River port named Serpa, not generally marked on the map. Four stewards and the second engineer subsequently developed fever, and it is believed that they became infected at the small port above mentioned, which is not a regular port of call for ocean-going steamers. Two of the patients were placed in hospital at Manaus, about 1,000 miles up the Amazon. One of them died there; the other recovered. A second patient was landed at Para, on the homeward voyage, and died in hospital there. The second engineer and another steward, who did not show signs of sickness before the day on which the vessel left Para homeward bound, were treated in the ship's hospital, but died and were buried at sea between Para and Madeira. Two German passengers, who had also visited the small river port, joined the ship at Para, coming down for that purpose by river steamship. They developed the disease soon after embarkation, but growing better were landed in a convalescent condition at Lisbon. Everything was done at Para, as far as can be ascertained, to prevent contagion. The mosquitoes on board were all destroyed and swept away before the ship left Para. After landing the convalescent patients at Lisbon the steamship proceeded to her subsequent ports of call, viz, Oporto, Vigo, and Havre, and at each of those ports everybody on board was well, and the ship passed a satisfactory inspection at Liverpool.

The *Lanfranc* arrived at this port June 3, and it was publicly announced by the port sanitary authority of Liverpool June 4 that the ship was in perfect sanitary condition, with no sickness on board, and she was authorized to dock. (See Public Health Reports, June 18, 1909, pages 877 and 883, and June 25, 1909, page 926.)

HAWAII.

Report from Honolulu—Examination of rats for plague infection.

Chief Quarantine Officer Hobdy reports, June 14:

HONOLULU.

Week ended June 12.

Total rats taken.....	605
Trapped.....	604
Found dead.....	1
Examined bacteriologically.....	444
Plague infected.....	0
Classification of rats trapped:	
<i>Mus alexandrinus</i>	66
<i>Mus musculus</i>	276
<i>Mus norvegicus</i>	125
<i>Mus rattus</i>	138
Average number of traps set daily.....	1,294

HONDURAS.

Report from Ceiba, fruit port—Sanitary conditions improved.

Acting Assistant Surgeon Jumel reports:

Week ended June 23. Present officially estimated population, 6,800. General sanitary condition of this port and the surrounding country during the week, good.

Local sanitary improvement continues. Improved conditions are maintained by frequent inspection. The authorities are now engaged in having grass cut and removed from streets and sidewalks. Garbage is regularly and efficiently removed from the city limits.

Bills of health issued to the following-named vessels:

Date.	Vessel.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.	Pieces of baggage disinfected.
June 18	Joseph Vaccaro.....	33	0	0	0
18	Orleanian.....	31	0	0	0
19	Colombia.....	19	0	0	0
20	John Wilson.....	17	2	0	0
20	Viator.....	17	0	0	0
21	Bodo.....	17	0	0	0
23	Rosina.....	34	0	0	0

Temperature of all persons on above-named vessels taken at time of clearance.

Report from Tela, fruit port.

Acting Assistant Surgeon Roe reports:

Week ended June 19. Present officially estimated population, about 1,500. General sanitary condition of this port and the surrounding country during the week, good.

Bills of health issued to the following-named vessels:

Date	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
June 14	Imperator	New Orleans.....	21	0	0
15	Vinland.....	do.....	16	0	0
17	John Wilson.....	do.....	17	0	0
17	Colombia.....	Mobile.....	19	0	0

INDIA.

Reports from Calcutta—Transactions of service—Cholera, plague, and smallpox—Plague in India and Bengal.

Acting Assistant Surgeon Allan reports, June 3:

Week ended May 29. No transactions.

Week ended June 5. Bill of health issued to steamship *Hohenfels*, bound for Boston and New York, with a total crew of 61, and to the steamship *Buceros*, bound for Philadelphia and New York, with a total crew of 60. The usual precautions were taken, holds fumigated, rat guards placed on wharf lines, and Asiatics' effects disinfected.

Week ended May 22. At Calcutta there were 52 deaths from cholera, 80 from plague, and 45 from smallpox; in Bengal 162 cases of plague, with 128 deaths; in India general 4,238 cases of plague, with 3,614 deaths.

Week ended May 29. At Calcutta, 65 deaths from cholera, 87 from plague, and 19 from smallpox; in Bengal 115 cases of plague with 103 deaths; in India 2,682 cases of plague with 2,319 deaths.

ITALY.

Report from Naples—Inspection of vessels—Examination of emigrants—Smallpox in Naples—Case of smallpox among passengers for steamship Hamburg—Status of smallpox in Italy.

Assistant Surgeon Wollenberg reports, June 14:

Vessels inspected at Naples, week ended June 12.

Date.	Name of ship.	Destination.	Steorage passengers inspected and passed.	Pieces of baggage inspected and passed.	Pieces of baggage disinfected.
June 8	Cretic.....	New York.....	1,204	190	1,580
8	Hamburg.....	do.....	518	80	750
9	Pannonia.....	do.....			
9	Tommaso di Savoia.....	do.....	594	50	680
11	Berlin.....	do.....	771	90	950
11	Venezia.....	do.....	1,092	150	1,220
	Total.....		4,179	560	5,180

Rejections recommended.

Date.	Name of ship.	Tra- choma.	Favus.	Sus- pected tra- choma.	Sus- pected favus.	Measles.	Small- pox.	Other causes.	Total.
June 8	Cretic.....	23		14	2	1		20	60
8	Hamburg.....	19	4	19			1	6	49
9	Pannonia.....								
9	Tommaso di Savoia..	18		13				3	34
11	Berlin.....	11		5				8	24
11	Venezia.....	19	3	10	1			11	44
	Total.....	90	7	61	3	1	1	48	211

Smallpox in Naples.—During the week ended June 13, 25 cases of smallpox with 4 deaths were reported at the health office of the city of Naples.

A case of smallpox was discovered at the examination of steerage passengers for the steamship *Hamburg* June 8. The patient was transferred to the Cotugno hospital for contagious diseases. Ten contacts were returned to the boarding house in which all had been lodged and where they will be held under strict observation for 2 weeks. The lodgers have been vaccinated, and the boarding house has been disinfected.

Status of smallpox in Italy.—Week ended June 13. Cases: Valduggia (Novara) 1; Chianche (Avellino) 2; Oppido 2, Bovalino 1, Tatrino 1, Curoffa (Reggio Calabria) 1.

JAPAN.

Reports from Yokohama—Inspection and fumigation of vessels—Plague and plague-infected rats—Plague rats in Tokyo and measures taken for rat destruction and disinfection of coastwise vessels.

Passed Assistant Surgeon Cumming reports, June 9 and 14:

Week ended June 5. Bills of health issued to 10 steamships, having an aggregate of 2,268 members of crews and 557 steerage and 240 saloon passengers.

The U. S. S. *Charleston*, *Denver*, *Cleveland*, and *Chattanooga* sail hence for Manila via Japan, Russian, and Chinese ports; the *Antiochus*, from Liverpool via Suez and ports, with 475 Chinese steerage passengers and 104 members of crews, sailed for Seattle; the *Gymeric*, with 37 members of crews, and *Prinz Sigismund*, with 4 saloon passengers and 107 members of crews, sailed for Manila; and the *Chiyo Maru*, with 161 saloon and 29 second-cabin passengers, 53 steerage passengers, and 243 members of crews, sailed for San Francisco via Honolulu.

The steamship *Inverclyde*, hence for New York or Boston via Manila and ports, was fumigated in part, and the steamship *Wray Castle* was fumigated throughout, before sailing for New York via Manila.

There have been 17 cases of plague reported during the past 4 weeks, and plague-infected rats have been found. The authorities have forbidden the exportation or removal of rags, etc., from the infected districts and are working with energy. The finding of infected rats in Tokyo has led to renewed efforts on the part of the

sanitary authorities of that city. More stations for the reception of rats have been established, rats are being purchased in the rural districts, factories and railway authorities have been notified to increase their vigilance, and the disinfection of small boats has been begun.

Bills of health issued week ended June 12 to 3 steamships having an aggregate of 511 members of crews, and 1,051 steerage passengers, and saloon passengers.

The *Korea*, with 64 saloon and 224 steerage passengers, was bound to Manila via Japanese ports; the *Kaga Maru* to Seattle, via Victoria, with 35 saloon and 142 steerage passengers. The sailing of the *Hong Kong Maru* for Salina Cruz, Mexico; Callao, Peru; Valparaiso, Chile, and other South American ports is interesting from a sanitary standpoint. She carried 121 Chinese and 553 Japanese steerage emigrants for Peru, and will stop at Honolulu for freight only. This is the second steamship to sail of a line started by the Toyo Kisen Kaisha, and it introduces a new factor of danger to the Orient in the introduction of yellow fever and infection by mosquitoes, so common in China.

Examination of emigrants.

Number of emigrants per steamship *Kaga Maru* June 9 for Seattle, Wash.: Examined, 48; rejected, 4; held for observation, 12.

Methods in use at Yokohama for preventing ingress of rats into hulls of vessels—General shipping conditions—Care of food supply and personnel.

The following is received from Doctor Cumming, under date of June 14, in response to inquiry made by the bureau May 18:

1. *Trade with the Pacific coast of America direct or via Hawaii.*—This trade is conducted, with few exceptions, in vessels of various mail lines, the port of origin of which is Hongkong, in which port the vessels of such lines, i. e., Pacific Mail, Toyo Kisen Kaisha, to San Francisco via Hawaii, Nippon Yusen Kaisha, Great Northern, Bank, and other lines to Puget Sound, lie empty, or while unloading and cleaning for an average period of ten days. Upon arrival at this port these vessels have taken on cargo at Hongkong, Amoy, or Keelung (during tea season only), Shanghai, Nagasaki, Kobe, Yokkaichi, Shimidzu (during tea season only), and Yokohama, which is the last port of call, and at which these vessels lie for about two days.

All vessels except those of the Nippon Yusen Kaisha lie out in the open bay, and these vessels are compelled to wear rat guards while at the dock and have a light on the gangway if one be used. Exceptions to origin in Hongkong are (a) vessels of the Alfred Holt (blue funnel) line from Liverpool via Suez, Colombo, Straits, China, and Japan ports for Seattle and Victoria. These vessels bear a certificate on the original bill from Liverpool or Glasgow, showing fumigation while empty, and consular statements on the supplemental bills as to use of rat guards, etc., in Singapore and Port Said. (b) Vessels of Chargeurs Réunis, which follow a similar course, and bear fumigation certificates from Havre, and which after leaving here, sail for Hawaii or Seattle direct. (c) An occasional oil steamer.

All of the above vessels are more or less completely loaded up on arrival here and it is impracticable to fumigate them at this station. All are or should be fumigated at port of departure.

2. *Vessels having Yokohama as their port of departure.*—These vessels include: (a) A large number of freight vessels trading between Yokohama and New York and touching at any port of Japan, China, Straits Settlements, Malabar, or Coromandel coasts of India, Africa, or wherever freight is offered, and this includes Manila or Cebu during sugar and hemp seasons. These vessels are empty at Yokohama, and I invariably fumigate them unless they have just been treated at Manila or have not stopped at infected ports, such exceptions being rare. Their crews are generally Lascars shipped at Singapore on the way to America or Chinese from Hongkong. They are bathed and disinfected here or at Shanghai or Kobe or at Hongkong, but I am informed that when shipped at Singapore no precautions are taken other than those prescribed by the intelligence of the ship's master. (b) Mail steamships of the German Lloyd, Nippon Yusen Kaisha, and China Navigation Company (Blue Funnel) plying between here and Australia via Manila all carry doctors and the Japanese vessels are fumigated here, but the British and German steamers, under agreement with the chief quarantine officer for the Philippine Islands, are not so treated if having certificate of fumigation at Melbourne or Hongkong. (c) Vessels of the Pacific Mail, Toyo Kisen, and Great Northern stopping here en route from Pacific coast ports to Manila are simply inspected and not fumigated.

Freight.—The more the spread of plague in the East is studied the more important and complex does the problem become and the more apparent it becomes that the only safe method would be a fumigation of the vessel with cargo in her upon arrival.

Under arrangement with the consulate and shippers every vessel or shipping note (except for silk) and every consular invoice is initialed by me before acceptance by the company and the place of storage or origin is ascertained. The office interpreter visits the health office every morning and presents a statement to me of the location where any case of cholera or any rat or human plague has been found, and this is referred to for decision as to whether freight shall be shipped.

The export custom godown is kept free from infected rats by the authorities, but the cargo lighters are small and are kept fairly clear by the boatmen and water police, and when loading or unloading is done at night they are brightly lighted.

Food stores.—Ship chandlers are required to use care in obtaining foodstuffs.

Personnel.—Steerage passengers and members of crews shipped here are bathed and their effects are disinfected whether quarantinable disease be reported in the city or not. By a system of registering passports, no steerage passengers from Osaka or Kobe are allowed to embark unless they prove absence from those places for 7 days.

Reports from Kobe—Inspection of vessels—Plague—Destruction of rats at Osaka and summary of plague rats found—Smallpox at Osaka.

Acting Assistant Surgeon Knight reports, June 7 and 10:

Week ended May 29. Supplemental bills of health granted to 3 steamships and 1 original bill of health granted to 1 steamship.

There were inspected 118 members of crews and 448 steerage passengers, and 47 members of crews and 25 steerage passengers were bathed and disinfected, and their effects were disinfected by steam. The number of pieces of baggage steamed was 180 and of bedding 52. Manifests were viséed for 38,533 pieces of freight, amounting to 3,145 tons. One vessel was fumigated with sulphur to kill vermin, and the forecabin was washed down with antiseptic solution.

Emigrants were examined as follows:

Per steamship *Manchuria* for Honolulu, passed 20, recommended for rejection, 14; for San Francisco, passed 5, recommended for rejection 5. Fifteen cases of human hair were disinfected with formalin.

Two cases of suspected plague with 2 deaths are officially reported.

On account of the number of cases of suspected plague in the city, I have made inspection of the freight lighters during the past week and found them to be in a fair sanitary condition.

Plague rats at Osaka—Smallpox.

The health of Osaka, adjacent to Kobe, has been in a very satisfactory state since January 1, 1909, but rats containing plague germs are still found in the boats moored in the Ajikawa River and also on the shore in the neighborhood of Nishi-Ajikawa and Kujo. The water police have been strictly enforcing the destruction of rodents in the boats, while the Kujo police have been carrying out house cleaning in the district in which plague rats are found. From January 1 to May 10, 52 rats infected with plague were caught on boats and 49 on shore. From May 10 to 31 no rats infected with plague were found in the river district. In Namba district one or two rats infected with plague have been discovered since January 1. Three cases of smallpox, with 1 death, were reported at Osaka from January 1 to May 31. The population of Osaka is about 1,000,000.

Compared with the corresponding period last year, the health conditions are reported to be much improved.

Week ended June 5. Supplemental bills of health granted to 5 steamships.

There were inspected 128 members of crew and 87 steerage passengers, and 100 members of crew and 72 steerage passengers were bathed and disinfected. Their effects were disinfected by steam. The number of pieces of baggage steamed was 419 and of bedding 146. Manifests were viséed for 47,267 pieces of freight, amounting to 4,422 tons.

Emigrants examined: Per steamship *Chiyo Maru* for Honolulu, passed 24, recommended for rejection 13; steamship *Chiyo Maru* for San Francisco, passed 9, recommended for rejection 4; per steamship *Kaga Maru* for Seattle, passed 32, recommended for rejection 16. The emigrants passed, together with 7 intending passengers to Victoria

by the steamship *Kaga Maru*, were inspected, bathed, and disinfected, and their effects were disinfected before embarkation.

The official returns of infectious diseases for the week show 3 cases of plague, with 1 death, at Kobe.

MEXICO.

Report from Coatzacoalcas—Inspection of vessels—Sanitary conditions.

Acting Assistant Surgeon Thompson reports, June 24:

Week ended June 23. Two vessels inspected. All on board were well at time of sailing. No fever cases occurred on board on either vessel while in port. The health of the port is satisfactory.

Report from Salina Cruz—No transactions.

Acting Assistant Surgeon Gochicoa reports, June 21:

Week ended June 19. No transactions.

Report from Tampico—Inspection and fumigation of vessels—Sanitary conditions.

Acting Assistant Surgeon Stowe reports, June 24:

Week ended June 23.

Vessels inspected and passed.....	5
Bills of health issued.....	5
Members of crews of outgoing vessels inspected.....	172
Passengers of outgoing vessels inspected.....	4
Vessels fumigated.....	1

No cases of quarantinable disease occurred during the week. Sanitary condition of the port and surrounding country good. Copious rains have fallen during the past week.

Report from Veracruz—Inspection and fumigation of vessels—Small-pox—Sanitary conditions—Typhus fever no longer epidemic in Mexico City.

Acting Assistant Surgeon Carter reports, June 21:

Week ended June 20.

Bills of health issued.....	6
Vessels inspected.....	1
Vessels fumigated.....	5
Passengers inspected.....	88
Members of crews inspected.....	220

One death from smallpox was reported June 15, with no new cases. No other contagious diseases were reported during the week, and the health conditions of Veracruz and vicinity are considered very good. Heavy rains have been falling and mosquitoes are becoming more numerous. The general health of the entire consular district is improved, especially as regards Puebla, where conditions were very bad. Reports from Mexico City show that the epidemic of typhus fever is over and that the general health conditions are much improved.

NICARAGUA.

Report from Bluefields, fruit port—Stegomyia abundant—Screening ordinance not enforced.

Acting Assistant Surgeon Layton reports:

Ten days ended June 19. Present officially estimated population, 2,500. General sanitary condition of this port and the surrounding country during the week, good.

Stegomyia calopus are present in large numbers. Breeding places abound since beginning of the rainy season. The screening decree issued last year is not enforced. Water containers are in use everywhere, some properly, some improperly screened. The greater number are unscreened and uncoiled.

Bills of health issued to the following vessels:

Date.	Vessel.	Destination.	Number of crew.	Number of passengers from this port.	Number of passengers in transit.
June 13	Marietta Di Georgio.....	New Orleans, New York, via Puerto Cortez (Honduras), and Mathewtown, Inagua (W. I.).	19	4	0
15	Chelston.....		30	0	1

PERU.

Report from Callao—Inspection and fumigation of vessels—Status of plague in Peru—Plague death at Callao—Plague and smallpox in Chilean ports.

Acting Assistant Surgeon Gutierrez reports, June 7:

Week ended May 29. Bills of health issued to 3 steamships with an aggregate personnel of 183 members of crews and 79 cabin and 15 steerage passengers; 2 of these vessels were fumigated prior to sailing.

Week ended June 5. One steamship with an aggregate personnel of 98 members of crew, and 48 cabin and 37 steerage passengers was fumigated.

The following is the latest report on plague in Peru received from the Director de Salubridad Publica:

Locality.	Cases May 21.	New.	Recovered.	Died.	Remaining May 27.
Department of Lima.....	10	0	2	0	8
Department of Callao.....	2	0	2	0	0
Department of Libertad.....	7	2	1	0	8
Department of Lambayeque.....	26	9	6	7	22
Department of Arequipa.....	4	0	1	0	3
Department of Cajamarca.....	2	2	1	0	3

One fatal case of plague occurred last week at Callao.

Bills of health from Valparaiso, Chile, report that smallpox continues present at Santiago.

Plague in Chile is reported on bills of health as follows: Antofagasta, May 29, 5 cases isolated in the lazaretto; Iquique, May 30, 10 cases in the lazaretto; 2 cases with 1 death during the past 2 weeks. No bill of health was received from Arica.

PHILIPPINE ISLANDS.

Reports from Manila—Smallpox—Vaccination—Status of cholera in the provinces—Recurrence of cholera in Mindanao—Inspection of vessels.

Chief Quarantine Officer Heiser reports, May 18 and 25:

Week ended May 15. Four cases of smallpox, with 1 death, were reported for the city of Manila.

During the week reports of cholera in the provinces were received by the bureau of health as follows:

Province.	Cases.	Deaths.
Pampanga.....	2	2
Samar.....	12	8
Sorsogon.....	8	5
Occidental Negros.....	8	2
Total.....	30	17

Smallpox.—While there has been considerable reduction in the number of cases of smallpox in the city of Manila, a few cases continue to gain admission from the outside by land routes, and these invariably occur among persons who have never been vaccinated. The certainty with which the smallpox infection seeks out, among hundreds of thousands of persons, those individuals who have not been vaccinated, shows conclusively the protection of vaccination.

Cholera.—For the first time in nearly 3 years, the Province of Capiz, which has been regarded as a true endemic focus of cholera, has reported no cases for the week. A large amount of sanitary work was carried out in that province. During the past week, however, the disease has again reappeared in Dapitan in Mindanao.

During the week consular bills of health were issued at the city of Manila as follows:

May 14, the British steamship *Antilochus*, with 88 members of crew, en route from Liverpool to Seattle and Tacoma, was granted a supplemental bill of health. May 14, the British steamship *Suveric*, with 67 members of crew and 3 passengers, was granted a bill of health for Tacoma. Personnel and cargo inspected prior to sailing. May 14, the British steamship *Kaifong*, with 64 members of crew and 36 passengers, en route from Amoy to Cebu and Iloilo, was granted a supplemental bill of health. May 15, the United States Army transport *Thomas*, with 194 members of crew and 1,172 passengers, was granted a bill of health for San Francisco via Nagasaki and Honolulu. Crew and steerage passengers bathed and their effects and baggage disinfected. Cargo and baggage either disinfected or passed after inspection. All persons on board inspected at the hour of sailing.

Week ended May 22. Smallpox, 5 cases, 1 death.

Cholera in the provinces:

Province.	Cases.	Deaths.
Cebu.....	9	6
Oriental Negros.....	10	9
Total.....	19	15

Consular bills of health issued as follows:

May 16, the United States Army transport *Kilpatrick*, with 160 crew and 803 passengers, granted a bill of health for New York. Crew and steerage passengers bathed and their effects and baggage disinfected. Cargo either disinfected or passed after inspection. Vessel partially disinfected. All persons on board inspected at Mariveles Quarantine Station prior to sailing. May 17, the British steamship *Taiyuan*, with 74 crew and 80 passengers, en route from Yokohama to Zamboanga, granted a supplemental bill of health. May 19, the British steamship *Stettin*, with 57 crew, en route from Singapore to Zamboanga, granted a supplemental bill of health.

RUSSIA.

Report from Libau—Increase of cholera at St. Petersburg—Smallpox—Examination of emigrants.

Acting Assistant Surgeon De Forest reports, June 18:

There is a considerable increase in the number of cases of cholera in St. Petersburg. From June 14 to 17 there occurred 106 cases, with 24 deaths, the greatest number occurring June 17, with 24 cases and 8 deaths.

Cholera is also present in the government of St. Petersburg. From June 10 to 14 there occurred 9 cases, with 4 deaths. Cholera reported to be present in Kronstadt.

At Libau, week ended June 13, there occurred 1 case of smallpox.

For steamship *Estonia*, sailing June 18, I have examined 813 emigrants, of whom about 700 will sail; 140 pieces of baggage have been disinfected.

ST. LUCIA ISLAND.

Report from Castries—Sanitary conditions.

Acting Assistant Surgeon Maylie reports, June 15:

Week ended June 12. Sanitary condition of port and vicinity good. No quarantinable diseases present.

VENEZUELA.

Report from Caracas—Summary of plague—Measures for rat destruction and general sanitation—Decree relative to sanitary defense of Caracas.

The following is received from Minister Russell, under date of June 13:

Since the outbreak of bubonic plague in Caracas there have been to date 10 cases, with a total of 4 deaths, officially reported. Two

foci of infection have been declared, and although no official report of rat examination has been published, it is understood that there is a general infection of rats in the city. No human cases have been reported from La Guaira, but the secretary of the health commission on a visit of inspection to that port discovered general infection among rats. The Government is keeping up and increasing active measures for rat extermination and general sanitation. Rat-killing squads have been appointed for each parish of the city, and a daily house-to-house inspection is made by the sanitary inspectors.

A general ordinance for the protection of Caracas against the plague has been issued.

[Inclosure—Translation—Forwarded.]

PUBLIC HYGIENE COMMISSION—GENERAL ORDINANCE FOR THE DEFENSE OF CARACAS
AGAINST PLAGUE.

I.—Sanitary organization of the city.

ARTICLE 1. In each parish there shall be a physician named by the public health commission as health officer.

ART. 2. The health officers shall be responsible for the sanitation of their respective parishes.

ART. 3. Each health officer shall have at his disposition 2 sanitary inspectors, 2 foremen, 2 squads of 10 men each; sufficient quantity of traps, arsenic, or phosphorous paste, rats' bait, sulphur, insect powder, bichloride of mercury, and other antiseptic and disinfecting substances.

ART. 4. The duties of the health officers are: (a) To carry out the orders received; (b) to give a daily account of work, occurrences, and important measures to the public hygiene commission; (c) to inspect all corpses before interment to prove whether or not death was caused by the plague; in suspicious cases to make bacteriological examination of the blood and tissues of the corpse; (d) to make practicable isolation and sanitation where there have been human cases of plague or infection of rats.

ART. 5. The health officers shall be under the direction of the director of hygiene, who is responsible for the fulfillment of their duties, making full report to the public hygiene commission.

ART. 6. The duties of sanitary inspectors are: (a) To carry out and have carried out the orders of the health officers; (b) to inspect the houses in their parish to insure the fulfillment of the sanitary regulations of the public hygiene commission; (c) to direct the work of the squads looking to the direct destruction of rats and the breaking up of their breeding places and the sanitation of houses.

ART. 7. The duties of foremen and of their gangs are: (a) To set traps and bait for rats and afterwards to kill the rats; (b) to break up their breeding places by setting poison and by stopping them up; (c) to sanitize infected houses and foci of infected rats.

II.—Measures in regard to garbage.

ART. 8. Householders must allow the health inspectors to enter their houses in order to carry out sanitary regulations.

ART. 9. Every house must have metallic deposits with metal tops for holding all sorts of garbage, scraps and residue of all kinds, pieces of bread, and everything left over from meals, vegetable skins and greens, kitchen refuse, etc., for holding the water used in cooking meat, scrubbing, and such foods as the remains of coffee, milk, soup, etc., for the common garbage of the house.

ART. 10. The contents of these deposits shall be given to the carter for destruction by fire or other means.

The liquid food deposit, by reason of its size and the frequency with which it is filled, may be emptied into the sink, contents being previously poisoned.

ART. 11. The chicken yards of houses must be fenced in and have rat-proof floors; they must have deposits for the chicken food, and these must be covered at night. If these conditions are not fulfilled, chicken yards will not be permitted.

ART. 12. No food residue shall be thrown on the floor; this is most important and a thing the health inspectors will inspect, and all transgressing the present article will be fined or arrested.

ART. 13. All foods and provisions must be kept in rat-proof places; such as metal cans and screened closets; the storerooms and pantry must be inaccessible to rats.

III.—*Protection of dwellings.*

ART. 14. The fruit trees of the houses must be made inaccessible to rats. To this end the trunk or branches are to be incased with tin sheeting to the extent of no less than half a meter or by placing metal funnels on them; removing the branches near the walls or eaves; if this is not done, the trees must be cut down.

ART. 15. Householdors are obliged to give entrance to employees specially charged with closing up rat holes and placing poison; and they shall keep the floors of their houses clean and solid, stopping all crevices that may give access to rodents or rats.

ART. 16. All places in the house communicating with drains or sewers shall be provided with deodorizers.

ART. 17. The walls of the houses must be plain and neat; those of the yard must be plastered.

IV.—*Direct destruction of rats.*

ART. 18. In accordance with the size of the house there shall be one or more traps for rats and others for mice always in use with suitable bait; the rats must be drowned in water with sublimate and their bodies burned. It is better to give them to the carters in charge of this work.

ART. 19. The water-closets must be most carefully seen to, for they are the breeding places of rats; dry water-closets must be closed whenever it may be possible, or hygienically constructed according to the model approved by the public hygiene commission.

ART. 20. The special work of one of the squads of the parish will be the destruction of rat burrows, in all places not within the reach of private individuals, outside of the dwelling, but within the houses, such as yards, patios, etc., and the house drains.

V.—*Sanitation and isolation of foci of human plague or of rodents.*

ART. 21. In order to determine the existence of foci of plague there are 3 sources of information: (a) Medical declaration; (b) the inspection of the health officer, who will have to give all permits for burial, after making the inspection; and (c) bacteriological verification of the rats, which must be sent, suitably labeled, to the bacteriological laboratory.

ART. 22. Sanitary inspection will be accomplished in the following manner by health inspectors: They shall announce in appropriate bulletins the number of the house and the street and the persons residing therein; they shall state the sanitary conditions and prior sicknesses and deaths for 6 months up to the date of inspection, and determine if the regulations of this ordinance and the regulations of the hygiene commission are exactly fulfilled in respect to the destruction of rodents and their like.

ART. 23. The sanitary inspection of stables, meat houses, grocery stores, warehouses, wine vaults, bottling establishments, candy shops, soap factories, bakeries, lodging houses, eating houses, hotels, etc., and other places where foods are stored or sold, shall be extremely careful.

ART. 24. The plague stricken shall be removed to hospital, with the exception of those who, in the opinion of the health officer and with the approval of the public hygiene commission, in accordance with the report of the director of hygiene, may guarantee in an effective manner the certainty of isolation in their home. In these cases special measures looking to making the house rat proof will be dictated, as expressed in the following article.

ART. 25. Houses where a case of plague occurs or where there are infected rats must be disinfected in order to destroy the superficial bacteria, and above all to destroy the fleas and other kinds of biting insects. After duly sealing the dwelling, sulphur is to be burned in a proportion of 2,500 grams per 30 cubic meters, leaving it exposed to these vapors for a period of no less than 12 hours. No other fumigation must be used but burnt sulphur, as it is that which destroys the flea. The bed clothing, soiled cloths, and clothing infected by the patient must be burned. The floors shall be washed with a strong solution of sublimate. The patios and yards shall be sprinkled with a strong solution of carbolic acid, lisol, or sulphate of copper. The entire house shall be made rat proof, the greatest rigor being used in carrying out the sanitary measures indicated in the foregoing articles. If, after having taken the precautions indicated, and the inhabitants of the house who must remain under observation having been inoculated with Yersin serum, another case of plague occurs, it will be necessary to take up the wooden floors of the house and remove the flat ceilings. If again more cases of plague are reported, the house will have to be burned as a last resort.

The requirements of this article will be carried out under the direction of the chief of disinfection, accompanied by the health officer of the parish.

VI.—*General measures referring especially to certain public buildings, large sewers, and drains.*

ART. 26. The principal market and the square it comprises and the slaughter house shall have a sanitary organization similar to that of the parishes and with equal functions and attributes.

ART. 27. The gulleys crossing the city must be constantly cleaned, garbage found in them burned, and the mountain sides previously cleaned and grubbed must be burned over. The food and fruit trees encountered will be destroyed; if they are private property they will be cut down when not protected by the owners in the way indicated in this ordinance.

ART. 28. There shall exist an organization of sanitation with an inspector of work, one foreman, and a squad for each large ravine crossing the city, with the duties of sanitation and rat extermination outlined in this ordinance. The principal occupation of this squad will be to catch rats, place poison, destroy rat nests, and poison rats by means of lethal fumes.

ART. 29. The sewers shall be suitably repaired and cleaned so as not to give shelter to rats. All sewer connections with houses and streets shall be covered with metallic or disinfecting fabric. Those well arched shall be suitably fumigated with poisonous fumes to destroy rats; the open drains and small sewers shall be subjected to the same measures of sanitation as the large ravines into which they discharge and shall be cared for by the corresponding squads.

ART. 30. By means of special ordinances this commission will regulate the régime of food establishments, lodging houses, bakeries, restaurants, soap factories, and other establishments of industry, the sanitary condition of which might be a menace to the public health.

Caracas, June 5, 1909.

(Signed) P. ACOSTA ORTIZ,
President of the Commission.

Approved.

AQUILES ITURBE, *Governor.*

FOREIGN AND INSULAR STATISTICAL REPORTS OF COUNTRIES AND CITIES—UNTABULATED.

ALGERIA—*Algiers*.—Month of May, 1909. Estimated population, 155,000. Total number of deaths, 339, including enteric fever 1, smallpox 7, typhus fever 29, diphtheria 1, and 78 from tuberculosis.

AUSTRALIA—*State of Victoria*.—Quarter ended March 31, 1909. Total number of deaths, 3,580, including tuberculosis 270, cancer 253, enteric fever 61, diphtheria 7, measles 2, scarlet fever 4, and 39 from whooping cough.

Melbourne.—Quarter ended March 31, 1909. Total number of deaths, 1,702, including tuberculosis 136, cancer 147, enteric fever 22, diphtheria 4, measles 2, and 1 from scarlet fever.

The State of South Australia, including the city of Adelaide.—Four weeks ended May 1, 1909. Estimated population: State, 394,692; city, 40,185. Total number of deaths, 283, including enteric fever 2, diphtheria 6, plague 2, and 30 from tuberculosis. Cases: Enteric fever 26, scarlet fever 25, diphtheria 90, and tuberculosis 39.

AUSTRIA-HUNGARY—*Brunn*.—Month of April, 1909. Estimated population, 108,944. Total number of deaths 272, including tuberculosis 50, diphtheria 2, whooping cough 2, scarlet fever 1, and 11 from measles.

AZORES—*St. Michaels*.—Month of April, 1909. Estimated population, 131,183. Total number of deaths, 243, including measles 1, whooping cough 12, diphtheria 2, enteric fever 1, and 5 from tuberculosis.

CHILE—Punta Arenas.—Month of April, 1909. Estimated population, 12,000. Total number of deaths, 30, including 3 from tuberculosis.

EGYPT—Cairo.—Annual report for the year 1908. Estimated population, 692,657. Total number of deaths, 23,664, of which number 943 were foreigners. The total number of deaths correspond to an annual death rate of 34.01 per 1,000 of population, including smallpox 95, measles 89, scarlet fever 3, diphtheria 317, enteric fever 183, typhus fever 359, whooping cough 15, leprosy 4, and 1,475 from tuberculosis.

Alexandria.—Annual report for the year 1908. Estimated population, 385,934. Total number of deaths, 11,027, of which number 908 were foreigners. The total number of deaths correspond to an annual death rate of 28.5 per 1,000 of population, including smallpox 19, measles 40, scarlet fever 9, diphtheria 86, enteric fever 99, typhus fever 9, plague 59, whooping cough 7, leprosy 1, and 941 from tuberculosis.

Port Said.—Annual report for the year 1908. Estimated population, 59,903. Total number of deaths, 1,126, of which number 152 were foreigners. The total number of deaths correspond to an annual death rate of 18.7 per 1,000 of population, including smallpox 19, diphtheria 2, enteric fever 22, typhus fever 1, plague 8, beri-beri 2, and 71 from tuberculosis.

Tantah.—Annual report for the year 1908. Estimated population, 75,707. Total number of deaths, 2,240, corresponding to an annual death rate of 29.5 per 1,000 of population, including measles 8, diphtheria 81, enteric fever 5, typhus fever 8, plague 4, and 76 from tuberculosis.

FRANCE—Nantes.—Month of May, 1909. Population, 1900, 132,900. Total number of deaths, 276, including enteric fever 1, and 85 from tuberculosis.

GREAT BRITAIN—England and Wales.—The deaths registered in 76 great towns in England and Wales during the week ended June 12, 1909, correspond to an annual rate of 12.6 per 1,000 population, which is estimated at 16,445,281.

London.—One thousand one hundred and thirty-five deaths were registered during the week, including measles 62, scarlet fever 10, diphtheria 7, enteric fever 2, whooping cough 21, tuberculosis 109, and 16 from diarrhea. The deaths from all causes correspond to an annual rate of 12.2 per 1,000. In Greater London 1,562 deaths were registered. In the "outer ring" the deaths included 11 from measles, 1 from diphtheria, 1 from scarlet fever, and 5 from whooping cough.

Ireland.—The average annual death rate represented by the deaths registered during the week ended June 12, 1909, in the 21 principal town districts of Ireland was 16.7 per 1,000 of the population, which is

estimated at 1,142,308. The lowest rate was recorded in Dundalk, viz, 4.0, and the highest in Ballymena, viz, 43.1 per 1,000.

Scotland.—The deaths registered in 8 principal towns during the week ended June 12, 1909, correspond to an annual rate of 14.5 per 1,000 of the population, which is estimated at 1,839,038. The highest rate of mortality was recorded in Paisley, viz, 19.9, and the lowest in Leith, viz, 11.6 per 1,000. The aggregate number of deaths registered from all causes was 518, including diphtheria 5, measles 3, scarlet fever 5, enteric fever 3, and 22 from whooping cough.

Aberdeen.—Month of May, 1909. Estimated population, 181,918. Total number of deaths, 225, corresponding to an annual death rate of 14.6 per 1,000 of population, including measles 3, scarlet fever 1, whooping cough 7, diphtheria 1, enteric fever 1, and 28 from tuberculosis.

Dundee.—Month of May, 1909. Estimated population, 169,409. Total number of deaths, 272, corresponding to an annual death rate of 18.9 per 1,000 of population, including whooping cough 6, diphtheria 2, and 46 from tuberculosis.

Edinburgh.—Month of May, 1909. Estimated population, 355,366. Total number of deaths, 475, corresponding to an annual death rate of 15.7 per 1,000 of population, including scarlet fever 1, whooping cough 34, diphtheria 2, and 46 from tuberculosis.

Glasgow.—Month of May, 1909. Estimated population, 872,021. Total number of deaths, 1,212, corresponding to an annual death rate of 16.4 per 1,000 of population, including measles 2, scarlet fever 17, whooping cough 91, diphtheria 12, enteric fever 1, and 171 from tuberculosis.

JAMAICA—Kingston.—Month of May, 1909. Estimated population, 52,065. Total number of deaths, 105, including enteric fever 8, and 14 from tuberculosis.

SPAIN—Cadiz.—Month of May, 1909. Estimated population, 69,382. Total number of deaths, 130, including whooping cough 12, measles 1, and 19 from tuberculosis.

Huelva.—Month of May, 1909. Estimated population, 24,000. Total number of deaths, 60, including smallpox 1, measles 1, and 8 from tuberculosis.

Madrid.—Month of May, 1909. Estimated population, 573,676. Total number of deaths, 1,492, including smallpox 73, typhus fever 176, enteric fever, 30, scarlet fever 4, diphtheria 6, measles 28, whooping cough 10, and 143 from tuberculosis.

Seville.—Month of May, 1909. Estimated population, 148,315. Total number of deaths, 391, including measles 8, enteric fever 3, diphtheria 4, smallpox 1, typhus fever 13, scarlet fever 3, and 55 from tuberculosis.

Cholera, yellow fever, plague, and smallpox, from June 26 to July 9, 1909.

[Reports received by the Surgeon-General, Public Health and Marine-Hospital Service, from American consuls, through the Department of State and from other sources.]

[For reports received from December 25, 1908, to June 25, 1909, see PUBLIC HEALTH REPORTS for June 25, 1909.]

[NOTE.—In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Swatow.....	May 11-22.....			Still present.
India:				
Bombay.....	May 30-June 8.....		14	
Calcutta.....	May 16-29.....		117	
Madras.....	May 29-June 4.....		1	
Necapatam.....	May 8-14.....		4	
Rangoon.....	May 16-22.....		1	
Indo-China:				
Saigon.....	May 9-15.....	1		
Philippine Islands:				
Provinces—				
Cebu.....	May 16-22.....	9	6	Present.
Dapitan.....	May 9-15.....			
Negros Occidental.....	May 9-22.....	18	8	
Pampanga.....	May 9-15.....	2	2	
Samar.....	May 9-15.....	12	8	
Sorsogon.....	May 9-15.....	8	2	
Russia:				
St. Petersburg.....	June 2-17.....	132	33	
St. Petersburg, government.....	June 10-14.....	9	4	
Straits Settlements:				
Singapore.....	May 9-15.....		6	

YELLOW FEVER.

Barbados, general.....	June 13-20.....	1		St. Joseph parish.
Brazil:				
Bahia.....	May 22-June 4.....	18	7	
Manaos.....	May 23-29.....		2	
Para.....	May 30-June 12.....	5	5	
Pernambuco.....	Apr. 15-30.....	3		
Ecuador:				
Guayaquil.....	May 23-29.....		7	
Mexico:				
Merida.....	June 5-11.....	2		

PLAGUE.

Australia:				
Adelaide.....	Apr. 30-May 1.....	1		
Sydney.....	Apr. 18-24.....	1		
Brazil:				
Rio de Janeiro.....	May 17-23.....	1		
Chile:				
Antofagasta.....	May 9-30.....	13	5	May 29, 5 cases in the lazaretto.
Iquique.....				May 30, 10 cases in the lazaretto.
China:				
Canton.....	May 9-22.....	55	8	Epidemic.
Chinchew.....	May 22.....			
Hongkong.....	May 2-15.....	8	6	
Swatow.....	May 16-22.....		150	
Ecuador:				
Guayaquil.....	May 23-30.....		3	
Egypt:				
Alexandria.....	May 30-31.....	1		
Port Said.....	May 29-June 9.....	1		
Provinces—				
Assiout.....	May 14-June 8.....	11	3	
Garbleh.....	June 2-8.....	8	2	
Fayoum.....	June 3-9.....	6	1	
Menouf.....	Jan. 18-June 9.....	2		
Indo-China:				
Saigon.....	May 9-22.....	5	5	

Cholera, yellow fever, plague, smallpox, etc.—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Formosa.....	May 23-29.....	36	35	In south and central part s.
Kobe.....	May 30-June 5....	3	1	
Yokohama.....	May 25-June 7....	7	4	
Peru:				
Arequipa, department.....	May 8-20.....	4	2	
Cajamarca, department.....	May 8-27.....	6	2	
Callao, department.....	May 8-20.....	3	1	
Lambayeque, department.....	May 8-27.....	9	8	
Libertad, department.....	May 8-27.....	4	1	
Lima, department.....	May 8-20.....	4	2	
Venezuela:				
Caracas.....	May 17.....		1	

SMALLPOX.

Algeria:				
Algiers.....	May 1-31.....		7	
Argentina:				
Buenos Aires.....	Mar. 1-31.....		4	
Rosario.....	Apr. 1-30.....	1	1	
Austria:				
Galicia.....	June 6-12.....	2		
Brazil:				
Bahia.....	May 22-June 4.....	4	1	
Pernambuco.....	Apr. 1-May 15.....		20	
Rio de Janeiro.....	May 17-23.....	18	1	
Santos.....	May 10-16.....		1	
Sao Paulo.....	May 10-16.....		1	
Canada:				
Nova Scotia—				
Halifax.....	June 13-19.....	2		
Quebec—				
Montreal.....	June 17.....			2 cases additional at Grosse Isle on s. s. Virginian.
Ceylon:				
Colombo.....	May 23-29.....	2		
Chile:				
Santiago.....	May 29.....			Still present.
China:				
Amoy.....	May 9-15.....			Present.
Hankau.....	Apr. 25-May 8.....			Do.
Hongkong.....	May 2-15.....	6	5	
Shanghai.....	May 10-June 6.....		2	Among natives.
Egypt:				
Cairo.....	May 21-June 3.....	5	5	
Suez.....	May 21-June 17.....	42	3	
France:				
Paris.....	May 23-June 12.....	23	2	
Germany, general.....	May 30-June 12.....	12		
India:				
Bombay.....	May 26-June 8.....		25	
Caleutta.....	May 16-29.....		64	
Madras.....	May 22-June 4.....		4	
Rangoon.....	May 12-29.....		6	
Indo-China:				
Saigon.....	May 9-15.....	6	3	
Italy, general.....	May 31-June 13.....	29		
Naples.....	May 31-June 13.....	32	4	
Rome.....	Mar. 7-13.....	1	1	
Japan:				
Moji.....	June 6.....	1		From steamship Selja
Osaka.....	Jan. 1-May 31.....	3		
Yokohama.....	June 1-7.....	1		
Java:				
Batavia.....	May 6-22.....	4		
Mexico:				
Aguas calientes.....	June 21-27.....		1	
Gua-lajara.....	June 11-26.....	2	1	
Monterey.....	June 14-27.....		10	
Veracruz.....	June 1-19.....	2	2	
Philippine Islands:				
Manila.....	May 9-22.....	9	2	
Portugal:				
Lisbon.....	May 30-June 19.....	14		

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Moscow.....	May 16-June 12....	126	37	
Odessa.....	May 30-June 12....	9		
Riga.....	June 6-12.....		7	
St. Petersburg.....	May 16-June 5....	46	12	
Siberia:				
Vladivostok.....	May 15-21.....	1		
Spain:				
Barcelona.....	June 1-21.....		11	
Huelva.....	May 1-31.....		1	
Madrid.....	May 1-31.....		73	
Seville.....	May 1-31.....		1	
Valencia.....	May 30-June 19....	22	1	
Vigo.....	May 23-June 19....		4	
Switzerland:				
Geneva, Canton.....	May 30-June 5....	7		
Turkey in Asia:				
Bassorah.....	May 23-29.....			
Smyrna.....	May 7-13.....	2		Present.
Turkey in Europe:				
Constantinople.....	May 31-June 13....		5	
Uruguay:				
Montevideo.....	Apr. 1-30.....		3	

Weekly mortality table, foreign and insular cities.

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Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Coburg.....	June 5	23,450	3	1						1	1			
Cornac.....	June 12	19,483	5	1										
Colozne.....	June 5	470,700	154	25							5	4	1	5
Colon.....	June 12	16,000	10											
Constantinople.....	June 6	1,000,000	213	40				4		5		1		
Copenhagen.....	May 29	447,000	156	14							1	1	2	5
Dalny.....	June 12	37,923	20	1										
Dresden.....	June 5	517,600	160	28							1	2	3	1
Dublin.....	do	394,525	147	28						3	1		2	4
Do.....	June 12	394,525	151	31					1	1	1		1	4
Dundee.....	do	169,409	41											
Durban.....	May 22	60,214	11											
East London.....	do	49,253	4											
Edinburgh.....	June 12	355,366	86	6										8
Erfurt.....	June 5	108,124	43	9									1	1
Fiume.....	do	50,811	14											
Do.....	June 12	50,811	22	3										
Frankfort-on-the-Main.....	June 5	362,600	110								2	1		
Frontera.....	do	9,000	1											
Do.....	June 12	9,000	6											
Do.....	June 19	9,000	4											
Geneva.....	June 5	121,500	42							1				
Georgetown.....	May 22	56,000	34	7										
Do.....	May 29	56,000	41	2										
Ghent.....	June 5	164,579	45	2									1	
Gibraltar.....	June 13	26,830	9											
Glasgow.....	June 18	872,021	266							3	5	2		13
Gothenburg.....	June 12	162,400	45	8										1
Greenock.....	do	72,300	15											
Guayaquil.....	May 29	75,000	86	6	3		7			3				
Halifax.....	June 19	40,787	6	1										
Hamburg.....	June 12	872,252	223	31							4	7	1	4
Hamilton, Bermuda.....	June 14	20,206	6											
Do.....	June 21	20,206	5											
Havre.....	June 5	132,439	58	14						1			1	
Do.....	June 12	132,439	60	13										2
Hull.....	do	275,552	59										1	
Kobe.....	June 5	380,717	135							1		1		
Königsberg.....	do	239,100	103	12							1		3	
Lausanne.....	do	60,000	20											
La Gualra.....	June 5	10,000	8	3										
Leeds.....	June 12	484,012	96	13							1	1	1	1
Leipzig.....	June 5	537,686	140	15						1	4		2	
Leith.....	June 12	85,721	19	3								2		
Liñau.....	June 13	90,000									1		3	
Liege.....	June 5	176,458	53	7							2		1	
Liverpool.....	June 12	760,357	234	26						2	3	3	22	2
Lisbon.....	May 15	406,869	165	27			1					2	1	2
London.....	June 12	4,833,938	1,135	109						2	10	7	62	21
Lübeck.....	do	97,000	26	5										
Madras.....	May 28	509,346	386										2	
Magdeburg.....	June 5	250,284	72	9						1		4		1
Manaos.....	May 29	52,000	27	1			2							
Do.....	June 5	52,000	32	3										
Manchester.....	June 12	631,533	232	23							5	4	11	1
Mannheim.....	May 29	182,455	57	7									11	
Manzanillo.....	June 5	1,700	1											
Do.....	June 12	1,700	2											
Do.....	June 19	1,700	2											
Matamoras.....	do	8,000	5											
Moncton, N. B.....	June 26	13,500	4	1										
Montreal.....	June 19	378,856	115	15						2	1	3	30	6
Moscow.....	June 5	1,335,104	732	78				13	7	1	12	9	19	4
Munich.....	do	566,000	231	39						1	4	1	9	4
Do.....	June 12	566,000	196	31							1	1	2	1
Newcastle-on-Tyne.....	do	281,584	69											1
Nottingham.....	June 5	260,000	73	1									3	
Nuevo Laredo.....	June 19	8,000	5							1				
Nuremberg.....	May 22	316,180	116	13							2		4	2
Do.....	May 29	316,180	103	12							3			3
Odessa.....	June 12	520,000	155	19						2	8	1	1	
Ottawa.....	June 19	80,200	12											

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Palermo.....	June 5	335,000	154	9	.....	.....	.....	.....	3	.....	1	.....	1
Do.....	June 12	335,000	116	7	.....	.....	.....	.....	.....	1	.....	.....	1
Para.....	June 5	185,000	89	7	.....	.....	2	.....	.....	.....	.....	.....	.....
Do.....	June 12	185,000	8	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Paris.....	do.....	2,776,394	837	169	.....	.....	.....	.....	.....	3	6	7	15
Penang.....	May 8	102,520	79	23	.....	.....	.....	.....	1	.....	.....	.....	.....
Do.....	May 15	102,520	69	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth.....	June 12	124,180	24	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Port of Spain.....	May 29	60,000	44	2	1	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	June 5	60,000	24	4	.....	.....	.....	.....	1	.....	.....	.....	.....
Prague.....	do.....	229,965	129	32	.....	.....	.....	.....	2	3	1	3	.....
Queenstown.....	June 12	7,684	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rangoon.....	May 22	255,155	140	6	6	1	.....	4	.....	.....	.....	.....	.....
Rotterdam.....	June 19	414,009	94	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
St. Petersburg.....	May 29	1,678,000	855	134	.....	1	.....	3	3	13	19	14	41
San Felix de Guixols.....	June 12	11,094	3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Santa Cruz de Tenerife.....	do.....	46,000	14	2	.....	.....	.....	.....	.....	.....	.....	1	.....
Schiedam.....	do.....	31,420	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	June 20	31,420	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheffield.....	June 5	450,000	106	15	.....	.....	.....	.....	1	1	.....	2	.....
Do.....	June 12	450,000	129	15	.....	.....	.....	.....	1	1	.....	5	2
Singapore.....	May 15	260,000	217	27	.....	6	.....	.....	.....	.....	.....	.....	.....
Southampton.....	June 12	124,867	31	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Shields.....	do.....	117,627	32	3	.....	.....	.....	.....	.....	1	.....	3	.....
Stettin.....	do.....	230,000	59	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarragona.....	do.....	20,400	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Tegucigalpa.....	June 8	24,000	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trieste.....	May 29	217,706	93	.....	.....	.....	.....	.....	3	.....	.....	1	.....
Turin.....	June 11	381,439	134	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Venice.....	May 8	179,286	76	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	May 15	179,286	60	5	.....	.....	.....	.....	.....	.....	.....	1	.....
Do.....	May 22	179,286	81	4	.....	.....	.....	.....	.....	1	1	.....	.....
Do.....	May 29	179,286	76	7	.....	.....	.....	.....	1	.....	2	1	.....
Vevey.....	June 5	14,500	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Victoria, B. C.....	June 19	30,000	6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vigo.....	June 12	40,000	5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vladivostok.....	May 13	82,494	15	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
West Hartlepool.....	June 12	66,750	13	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Winnipeg.....	June 19	122,000	20	3	.....	.....	.....	.....	1	.....	.....	.....	.....
Yokohama.....	June 7	392,870	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
Zanzibar.....	May 22	75,000	21	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon-General,

United States Public Health and Marine-Hospital Service